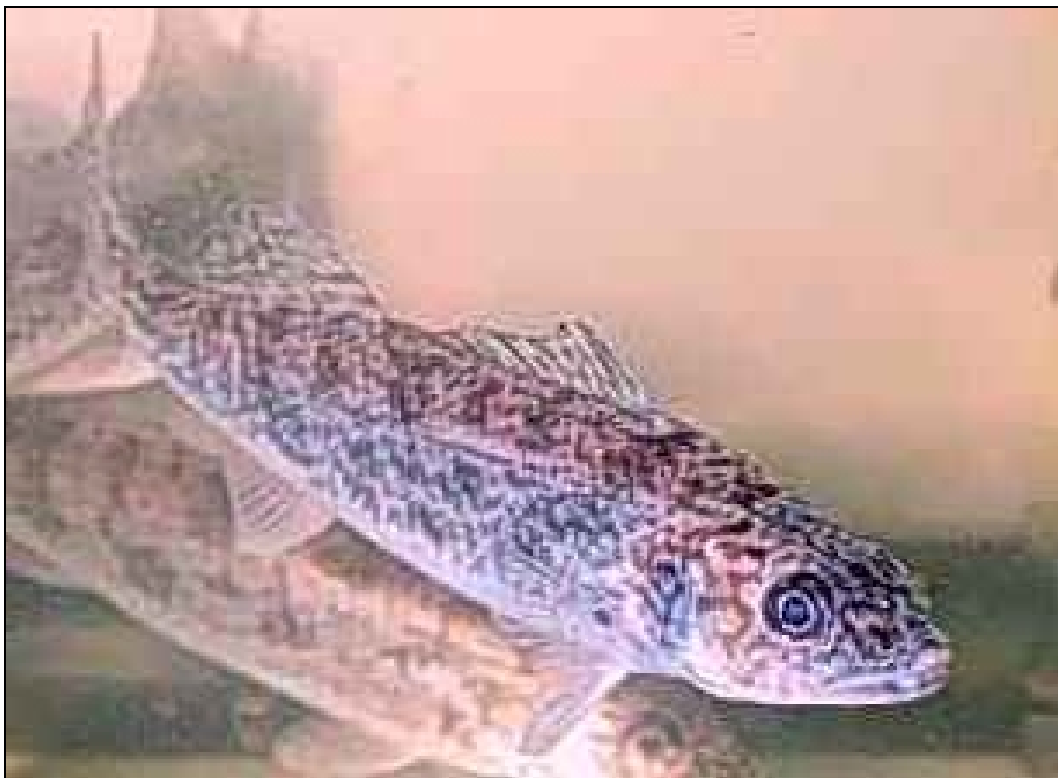


Michigan Department of Natural Resources  
Fisheries Division  
West Lake Superior Management Unit  
Spring 2003 Newsletter

- **Fisheries Division's West Lake Superior Management Unit:** The Michigan Department of Natural Resources (DNR) has been active in fisheries management in your area since the early 1900's. Through history, Michigan DNR fisheries management of the western Upper Peninsula waters has been conducted by staff from the Baraga, Crystal Falls and Marquette DNR offices. In the year 2000, the Michigan DNR Fisheries Division reorganized the management of the State's waters by Great Lake watershed drainages rather than by county boundaries. Within the new Great Lake drainage jurisdictions, the Upper Peninsula waters were defined by the drainage boundaries of Lake Superior, Lake Michigan, and Lake Huron. Waters that flowed to Lake Superior were managed by staff out of the Newberry and Baraga offices, while waters that flowed to Lake Michigan were managed by staff from the Escanaba and Crystal Falls offices. In the fall of 2002, Michigan DNR fisheries division divided the Lake Superior management boundary into the East and West units. The East Lake Superior Management Unit, based out of Newberry, deals with waters from the Chocoma River and east to Sault Ste. Marie, while the West Lake Superior Management Unit deals with waters west of the Chocoma River to the Michigan's westward border. The West Lake Superior Management Unit (WLSMU) will be based out of the Baraga office, with staffing at the Marquette DNR office on Mondays and Fridays.
  - **Fisheries Division's West Lake Superior Management Staff:** With State employee retirements occurring over the past few years, many of the former Baraga office fisheries staff are now retired. Biologists such as Ray Juttenen, Bill Deephouse, Barry Miller and Bernard Ylkanen, who crafted the fisheries programs that are in-place today, are now retired but yet serve to continue with advice and program recommendations. Fisheries staff that have been stationed at Baraga for quite some time (biologist Vern Nurenberg and technicians Valerie Miller and Ed Pearce), plan to continue to implement fisheries management programs for many more years. George Madison, who transferred from the Escanaba DNR office, is the supervisor for the West Lake Superior Management Unit. Steven Scott remains the Lake Superior Basin Coordinator, who oversees the East and West Lake Superior management units.
  - **Newsletters:** For years we have recognized the value of annual newsletters as a tool to provide up-to-date information regarding existing and upcoming fisheries programs. These newsletters allowed for good communication between our office and citizens who have an interest in Michigan's waters. Budget and personnel reductions in the late 1990's caused the newsletter program to lapse. Many of you have asked for the newsletters to continue. We plan to resume distributing newsletters each spring and will include an annual fish planting summary. To offset the costs associated with mailing and distributing, the annual WLSMU newsletter will be available only in electronic format.
  - **State Budget Reductions:** At the time of writing this newsletter, it is unclear what level of impact will occur on Fisheries Division as a result of the Governor's State budget reduction efforts. The following 2003 workplan, details in this newsletter, may be reduced by State mandated reductions in travel or funding.
  - **2002 DNR Fish Plants:** Attached at the end of this newsletter is a 2002 fish planting summary that was compiled by fisheries technician, Valerie Miller. Fish stocking information is available on-line at the Michigan DNR website found at <http://www.michigandnr.com/fish/fishstock.asp>.
  - **Walleye Rearing Program:** Walleye fingerlings are annually raised in small rearing ponds located throughout Michigan. Each spring, walleye eggs are collected from Little Bay de Noc and hatched at the Thompson State Fish Hatchery. These walleye eggs hatch into "fry" stage fish. Fisheries crews stock the "fry" into area rearing ponds that have been fertilized with organic and inorganic fertilizers. By late June, two-three inch walleye fingerlings are ready for harvesting from the rearing ponds. The WLSMU has two walleye rearing ponds that produce a reliable supply of fingerling size fish for west U.P. lakes and streams.
- Houghton County's Painsdale walleye rearing pond, known also as 11- Mile Lake, has been one of the largest and longest running walleye rearing ponds for the WLSMU. This pond produces between 100,000 to-300,000 walleye fingerlings each season
- Amber Pond (South of Bruce Crossing) is a small rearing pond that was reconfigured in 2000. Fish production results have improved since the year 2000 rework. This is a clay lined pond and produces nice fish, usually around 100,000 fingerlings annually. Amber pond was constructed by the Ottawa National Forest with the idea of waterfowl management as well as fish production. Islands and shallow areas for ducks has made this pond a valuable resource for more than just walleye fingerlings.

This summer, the WLSMU staff will be looking at developing an Amber II Pond. This pond will be located in the vicinity of the existing Amber Pond. Initial designs indicate the Amber II Pond will probably be around 5-6 acres and with its clay soils, it should be a good producer of walleye fingerlings. We hope to have this pond ready for the 2004 rearing season.

Also this summer, the WLSMU staff will be also looking at designing another new walleye rearing pond near the village of Arnheim. This will be 6-7 acres pond and will add to the overall production of walleye fingerlings that will be used for West UP stocking.



walleye fingerling

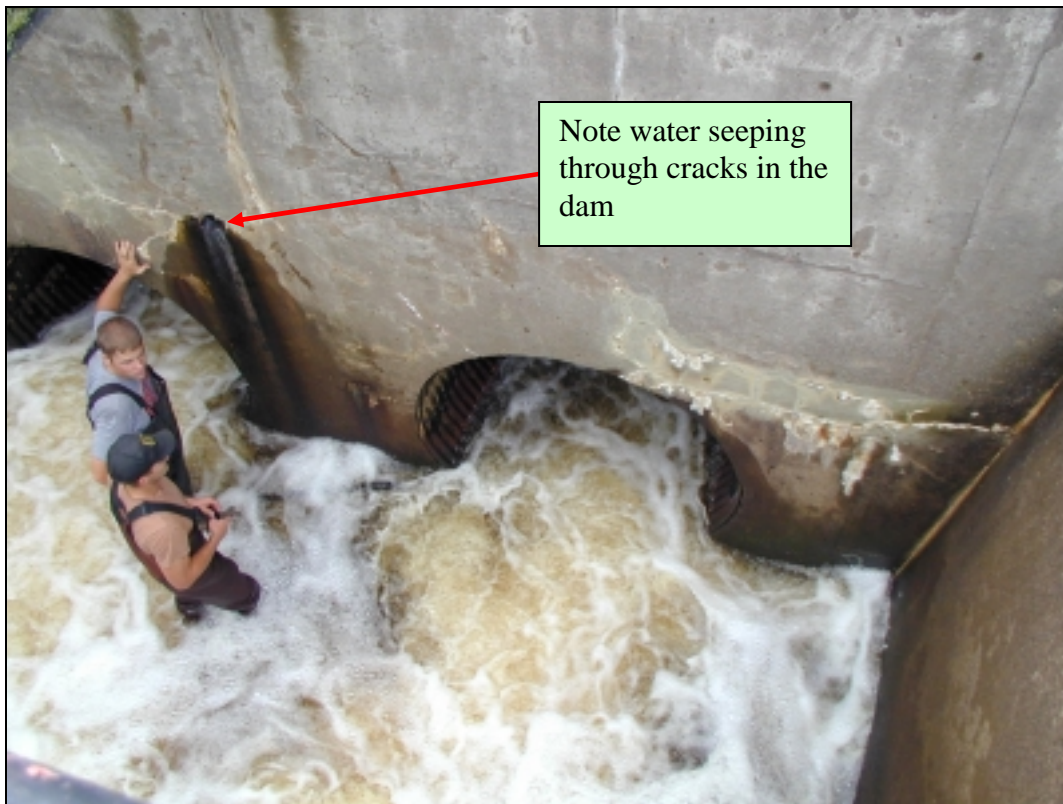
- **2003 Lake and Stream Survey Program:** Fisheries netting efforts for the spring of 2003 will focus on the Bond Falls Flowage in Ontonagon County. A walleye and northern pike population estimate will be calculated for the Bond Falls Flowage, and a summer/winter creel angler creel census will also be conducted here. Fisheries survey crews will visit Bond Falls again in early summer to document additional physical, chemical and population parameters. Other fisheries surveys planned for this summer include; Cornelia Lake, Lake Gerald, Lake Roland, Sunday Lake, Duck Lake, Langford Lake, Dinner Lake, Bob Lake, Castle Lake, Clear Lake, Manganese Lake, Mishike Lake, Penegore Lake, Yellow Dog River, Powdermill Creek and various trout lakes. Budget and travel allocations may influence the number of waters that will be surveyed this summer.



Netting crew operating a trap net.

- **Teal Lake, Marquette County:** Anglers found good perch fishing at Teal Lake during the winter of 2002. Again in the winter of 2003, anglers again targeted Teal Lake with heavy interest. If you happened to drive past Teal Lake on Highway M-28, during the winter of 2002 or 2003, you undoubtedly noticed the heavy fishing pressure. A fisheries division electrofishing survey conducted last year on Teal Lake showed that walleye stocking would be needed in the spring of 2003. We have scheduled a plant of one-million walleye fry for mid May of this year. The abundant sucker population that was present in the late 1980's and early 1990's was not noted in the 2002 electrofishing survey.

- **Black River Lake, drawdown:** Black River Lake is a 105-acre impoundment on the upper Black River in Gogebic County. The dam that creates this impoundment was constructed in 1966. Rainbow trout were planted annually from 1967 to 1970 at which time management was switched to brook trout. Since the late 1960's the impoundment has been gradually aging through the process of filling with the accumulation of sediments. The outlet dam for Black Lake has been deteriorating to the point that a mandate has been made by the State dam safety inspector to draw-down the impoundment and repair the dam. The aging of the impoundment has reduced the quality of the water for trout management, compared to what existed in the 1970's. A fisheries survey conducted in 2002 documented the demise of the trout fishery with the following comment "at present the impoundment becomes too warm in the summer to allow for any survival of stocked trout". Because of the lake's inability to support trout, brook trout stocking has been discontinued. Groundwater analysis indicates that during the summer, the lake's thin veneer of warm surface water regularly flows over the top of the dam to the Black River below. This warm-water influence on the Black River may be hindering the trout potential of the upper Black River. Discussions will occur this summer with anglers, sport fishing groups, and County officials to determine the feasibility of repairing the Black River Lake dam or to remove it and restore the brook trout fishery of the upper watershed.

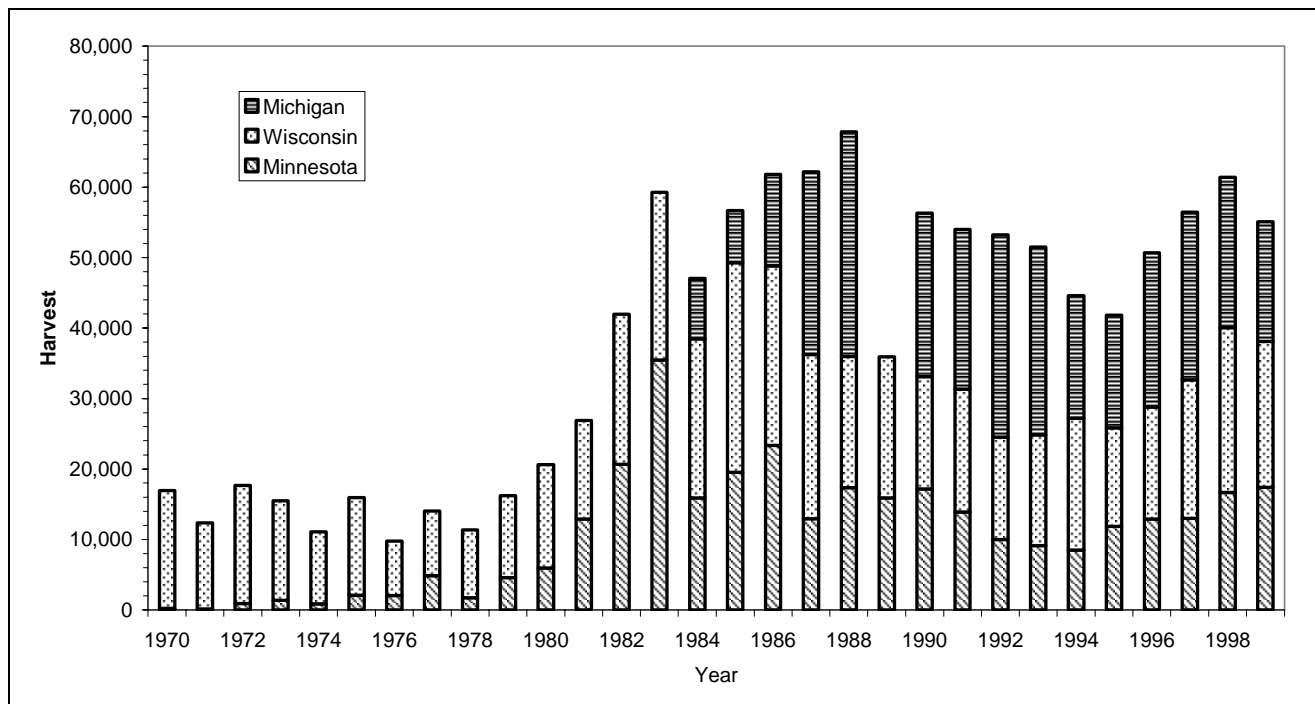


Voids in concrete headwall of Black Lake Dam

- **Pen-reared Chinook Salmon, Marquette:** Chinook salmon have been planted at Marquette, in the Dead River and Carp River, since the early 1980's. Traditionally every spring, 100,000 chinook fingerlings are planted into each of these rivers. A newly formed Marquette County sportfishing organization, known as the South Shore Fishing Association (SSFA), will be embarking on a pen-rearing program for the 100,000 chinook designated for the Dead River. In early May, the plant of chinook for the Dead River will be held in lots of 25,000 fish in four in-stream pens. The Wisconsin Electric generating facility has agreed to host this project by allowing the SSFA staff to secure the net-pens to the plant's seawall. Members of the SSFA will feed the chinook and keep an eye on their physical condition. Chinook salmon "smolt" during late May (smolting is the life stage of salmon where the fish migrates out of the stream to the Great Lake, and is the physiologic stage of the fish's life when they imprint on their parent stream). The three-four week pen-rearing is intended to increase the degree of imprinting (thus increasing future return when the fish is mature) that the chinook will have on the Dead River. Pen-rearing of salmon is a tricky operation and requires using a river that does not have a flashy spring-runoff waterflow. Pen-rearing operations in lower Michigan have shown increased survival of stocked salmon. Members of the SSFA and other sport groups have asked about pen-rearing other fish species. Research has shown that chinook are best suited for pen-rearing operations as compared with other trout and salmon species.



- **Lake Superior Trout and Salmon fishery:** Many Lake Superior anglers ask why the numbers of fish they catch, and species they catch, are different today than from what they remember in the early 1970's. Anglers remark that they remember better catches of steelhead, coho, chinook, brown trout, and smelt. The answer to these questions is closely linked to the increase in the lake trout population in Lake Superior. Quite simply, the abundance of lake trout has increased significantly in Lake Superior from the levels of the 1970's to the population levels of today (see figure below). The success of lake trout is due to restrictions on commercial fishing, significant control of the sea lamprey (a major predator of lake trout), and the stocking of lake trout from the 1970s through 1997. Lake trout now comprise the largest predator base of all fish in Lake Superior. Since lake trout are a native predator fish to Lake Superior, it makes sense that they would be the most abundant predator fish when compared to the non-native predators such as salmon and steelhead. The increase of lake trout has provided good fishing opportunities for these fish, however this impacts the abundance of other fish species. Lake trout are native predators and while they target herring and smelt for forage, the other fish species such as salmon and steelhead are also preyed upon by the lakere. The good news is that most of Michigan waters of Lake Superior have reached the goal for lake trout rehabilitation, lake trout are now self-sustaining and the need for hatchery stocking no longer exists. Population levels of lake trout may be near their equilibrium levels in Lake Superior and we should see the fishery stabilize in future years.



Recreational harvest of lake trout in U.S. waters of Lake Superior during 1970-1999. Data were based on state-specific creel survey programs (Sitar et al, 2003)

- **Walk-in Brook Trout Lakes, Chopper fish plants:** The Michigan DNR Fisheries Division will resume aerial stocking Marquette County walk-in brook trout lakes this spring. This program has been very popular with trout anglers seeking the remote fishing experience on a walk-in lake. Due to difficulties in securing helicopter services for the fish planting, the brook trout stocking for these walk-in waters has not occurred for the past few years. Beginning this spring, six remote lakes in northern Marquette County will receive plantings of yearling size brook trout from the Marquette State Fish Hatchery. Plans are scheduled for air drops of approximately 200 yearling brook trout into each of the following lakes; Rockingchair, North Pauls, South Pauls, East Keyhole, Island and Section 13 Lakes. Marquette County's Fred Waara chapter of Trout Unlimited has partnered with Michigan DNR Fisheries Division with past helicopter plantings of these lakes and they plan to continue their partnership with the 2003 fish plants.

- **Coaster Brook Trout:** Coaster brook trout are native brook trout species that once inhabited the near-shore waters of Lake Superior. These wild brook trout differ from inland lakes and stream brook trout, by virtue of growth to a larger size and by spending the majority of their life stage in the Great Lakes. Coaster brook trout were once common inhabitants of Lake Superior waters in the late 1800's, however habitat degradation and over-fishing have caused their populations to dwindle. The Salmon Trout River in north Marquette County holds one the last known vestiges of a self-sustaining population of coaster brook trout in Michigan waters. Cooperative efforts to learn more and protect existing coaster populations are occurring with Michigan DNR Fisheries research biologists, Michigan Technological University, U.S. Fish and Wildlife Service, Keweenaw Bay Indian Community, Trout Unlimited, and the Marquette Conservation District.

### Current coaster research/rehabilitation efforts in Michigan

#### Stocking

- 5 rivers are currently being stocked, 2 on the west side of the Keweenaw Peninsula and 3 in the Pictured Rocks region.
- Primary objective of the stocking is to reestablish self-sustaining populations that can eventually support some recreational harvest.

#### Strain Evaluation

- Two different strains of brook trout are being stocked, Tobin Harbor and Nipigon strain brook trout.

#### Regulations

- Size limits and bag limits have been changed to protect existing natural and stocked populations.

#### Research

- Stocking evaluation in various streams
- Basic ecological research on the last remnant population in Michigan waters of Lake Superior.



Coaster brook trout netting. Photo courtesy of Dr. Casey Huckins, Michigan Technological University

- **Welcome to E-License:** The Michigan Department of Natural Resources (MDNR) E-License system is designed to allow customers to purchase hunting and fishing licenses, special hunt applications and permits 24 hours a day, 7 days a week within applicable sales dates. You will also be able to print most small game and fishing licenses using your own printer. The DNR goal is to make the license-buying process easier for our customers who enjoy the great State of Michigan. If you wish to purchase your license from the internet, simply visit <http://www.mdnr-elasticence.com>.

- **Further Fishing information:** The Michigan DNR welcomes hearing from you regarding your questions, comments or concerns. A significant amount of fishing information is available to you on-line at the Michigan DNR website at <http://www.michigan.gov/dnr>, or you may contact the Baraga or Marquette DNR office to speak to a fisheries staff person. We wish you the best of success and enjoyment with you 2003 fishing season. We ask for you to lead others by your example of respect for your natural resources, by practicing stewardship, and taking a partner, whether young or old, fishing.

## Western Lake Superior Management Unit Stocking Report – 2002

Water	Species	Size (in.)	Number
<b><u>Baraga County</u></b>			
Alberta Pond	Brook trout	6.6	1,125
Alice Lake	Brook trout	7.3	2,250
Alice Lake	Brook trout	4.8	3,375
Huron River	Rainbow trout	7.0	21,000
Parent Lake	Walleye	1.8	10,000
Roland Lake	Brook trout	6.6	3,000
Sturgeon River	Brown trout	7.2	6,000
Sturgeon River	Brown trout	7.2	2,500
Sturgeon River	Lake Sturgeon	7.1	1,952
Vermilac Lake	Walleye	1.8	18,426

<b><u>Gogebic County</u></b>			
Beatons Lake	Rainbow trout	7.2	5,000
Beatons Lake	Splake	7.6	5,000
Beatons Lake	Walleye	1.5	16,673
Black River	Brook trout	7.2	900
Black River	Brown trout	7.2	1,400
Black River	Brook trout	7.2	900
Black River	Brown trout	7.2	2,290
Black River	Brook trout	7.2	900
Castle Lake	Brook trout	6.6	2,100
Cornelia Lake	Brook trout	6.6	1,100
Duck Lake	Walleye	1.5	15,647
Imp Lake	Splake	7.6	6,300
Lake Superior			
Little Girls Point	Brown trout	7.0	16,900
Black River Harbor	Chinook salmon	3.8	75,000
Little Carp River	Brook trout	4.3	30,000
Little Duck Lake	Rainbow trout	7.2	3,000
Little Duck Lake	Splake	7.7	1,500
Little Oxbow Lake	Walleye	1.5	4,616
Long Lake	Walleye	1.5	10,927
Marion Lake	Walleye	1.5	7,912
Mishike Lake	Brook trout	6.6	750
Moon Lake	Brown trout	7.1	4,600
Ormes Lake	Splake	7.7	2,500
Plymouth Lake	Brown trout	7.1	1,000
Presque Isle	Rainbow trout	7.2	2,500
Redboat Lake	Brook trout	4.8	2,000

<b><u>Houghton County</u></b>			
Bob Lake	Walleye	1.8	3,000
Boston Pond	Northern Pike	19.4	76
Clear Lake	Brook trout	6.6	1,900
Lake on Three	Rainbow trout	7.3	1,250
Otter Lake	Walleye	1.7	10,004
Penegore Lake	Brook trout	6.6	350
Perrault Lake	Brook trout	6.6	3,000
Portage Lake	Walleye	1.7	11,234
Portage Lake	Walleye	2.0	24,988
Roland Lake	Rainbow trout	7.2	13,000
Torch Lake	Walleye	2.0	25,599

Water	Species	Size (in.)	Number
<b><u>Marquette County (western half)</u></b>			
Big Trout Lake	Rainbow trout	3.5	20,946
Carp River	Brook trout	6.8	750
Carp River	Brook trout	6.8	750
Carp River	Chinook salmon	3.6	110,000
Carp River	Rainbow trout	7.1	16,000
Cedar Lake	Splake	7.7	1,060
Conner Creek	Brook trout	7.2	1,350
Dead River	Brown trout	6.9	8,910
Dead River	Brown trout	6.9	8,910
Dead River	Brown trout	7.0	2,980
Forestville Basin	Brown trout	7.3	4,200
Lake Superior	Chinook salmon	3.8	100,000
Marquette Bay	Splake	7.7	4,350
Marquette Bay	Splake	8.3	29,150
Little (Baby) Lake	Brook trout	10.0	200
Lower Dead River	Brown trout	7.4	6,500
Lower Dead River	Rainbow trout	7.2	1,250
Morgan Creek Pond	Brook trout	6.8	400
Mulligan Creek	Brook trout	7.1	549
Silver Lake Basin	Brook trout	8.8	565
Silver Lake Basin	Splake	7.4	11,500
Silver Lake Basin	Splake	2.7	11,628
Silver Pond	Brook trout	4.7	1,100
Sporley Lake	Splake	8.0	2,650
Yellowdog River	Brown trout	7.4	1,500
Yellowdog River	Brown trout	7.4	1,500
Yellowdog River	Brown trout	7.4	1,500
Yellowdog River	Brook trout	7.2	2,903
Yellowdog River	Rainbow trout	7.2	4,500

<b><u>Keweenaw County</u></b>			
Gratiot Lake	Walleye	2.0	33,358
Gratiot River	Brook trout	4.3	30,000
Lac La Belle	Walleye	2.0	27,920
Lake Fanny Hooe	Walleye	2.0	8,004
Lake Fanny Hooe	Splake	7.6	3,000
Lake Medora	Walleye	2.0	37,593
Lake Superior			
Copper Harbor	Splake	8.0	19,840
Copper Harbor	Splake	7.6	7,260
Lost Lake	Brook trout	4.7	600
Manganese Lake	Brook trout	4.7	3,000
No Name Pond	Brook trout	7.3	500

<b><u>Ontonagon County</u></b>			
Big Iron River	Chinook salmon	3.6	96,373
Calderwood Pond	Brown trout	7.1	500
Courtney Lake	Brook trout	6.6	3,500
Firesteel River	Brown trout	6.6	11,200
Mirror Lake	Splake	8.5	2,400
Ontonagon River	Rainbow trout	7.2	36,000
Ontonagon River	Lake Sturgeon	7.5	7,001
Trout Creek Pond	Brook trout	6.6	400
Victoria Impoundment	Walleye	1.5	4,219
Victoria Impoundment	Walleye	1.7	12,628

1/7/03